

The Role of The e-Money Payment System on The Economic Household Development

Rita Indah Mustikowati

Universitas Kanjuruhan Malang
rita_fairuz@yahoo.com

Mohammad Fakhruddin Mudzakkir

Universitas Kanjuruhan Malang
fakhruddin@unikama.ac.id

Abstract

Aims of this study to explore e-money system on the economic household development. Using a qualitative approach to the literature review. Using e-Money household transaction more easily and safer because not saving large amounts of cash in monthly spending money. For the aspect of technology using e money depend on usefulness and ease of use e-money system by household. Aspect Regulation and policy for economic development, described that various account payment was complicated, the house hold need regulation for one bank account that accessed for every purpose. In incentive aspect, it is expected reducing the burden of household business, such as administrative bank cost, and giving points reward who use e money payment system.

RESEARCH BACKGROUND

The crisis of 1998 is a valuable lesson to the Indonesian people not to get caught up in the financial system that is run only a small part of Indonesia society. The resilience of the banking becomes brittle when the banking system is largely sustained by a bigger firm. Thus the sector is not affected by the crisis are SMEs because of its business not directly related to the bank. SMEs is a strategic sector in development. The GDP Contribution amount is 57% with the absorption of the workforce reached 97%. However, only 20% of SMES that may be underserved in the banking system.

The stability of the financial system is influenced by a variety of risks, both in society as well as the Corporation. Financial instability can be triggered by external factors beyond which if not offset by financial conditions, good corporate or community, can lead to the possibility of default on the banking system. Therefore, the liquidity of banking can be upgraded from the participation of the general public users of the bank. The more the public saving bank, then more funds that can be used by development activities. So the dependence towards financing from abroad may be on the wane. (data on the composition of the banking source of funding).

Factually, the amount of ownership of an account of the population of ASEAN, Indonesia including the most less, that is just an amount of 15% of the total population of Indonesia (Firdaus Djaelani). The results of household surveys undertaken by Indonesian Bank in 2010 showed that 62% of households have no savings at all. The amount of ownership of an account in the bank be the beginning for society as individuals to use other banking services.

Studies conducted by Jake Kendall (2010) States that saving impact on poverty reduction in the short term because saving society will reduce the number of their consumption. For society, the beneficial ownership of the account on improving economic circumstances because financial arrangements more transparent, where there will always be the recording of expenditures, and increased efficiency as well as the level of financial management to become more accountable.

However obstacles can occur is the people's income is still low, the attitudes and preferences

of society towards banking is not always positive, as well as the costs of the management of the account is still expensive. Such things can reduce people's interest to use banking services. So not all communities can use banking services. As a result of banking services is exclusive. Studies conducted by Kemshon E and Whiley (1998) showed that the eksklusifitas the public against banking services is closely related to poverty. According to Bambang Widiyanto (2012), stated that 80% of the poor do not have access to banking services. To that end, in order to reduce poverty required the efforts of improving access to banking services to the community. Bank Indonesia is working with TNP2K (national team Accelerating poverty reduction) encourage equitable access to services by setting the inclusive financial policies as a national development strategy to encourage economic growth through equitable distribution of income, alleviating poverty as well as the stability of the financial system. Finance inclusive according to the definition of Bank Indonesia is: *The right of every person to have access and full service of financial institutions in a timely, convenient, informative, and affordable cost, with full respect to the dignity and her dignity. Financial services are available to all segments of society, with special attention to the poor, the poor productive, migrant workers, and residents in remote areas.*

Inclusive financial strategy has a target to all walks of life but have the focus to poverty reduction. Inclusive finance strategies in poverty reduction efforts set the characteristics of the target group:

1. The low-income, including those who have limited access or no access at all to any kind of financial service. This category includes the social community who may receive social assistance, as well as segments of the target part of the community empowerment program.
2. Poor productive, embraces the poor that can be attempted by yourself, including marginal and small farmers, fishermen, artists and artisans, merchants, small and micro-entrepreneurs in the informal sector in both the urban and the rural. This is a group of communities that lack resources to improve productivity and income.
3. Almost poor/not the poor, covers all residents who do not meet the criteria for entry in the lowest income from group of poor communities and poor work. Included in this category is domestic and international migrant workers, women and people in remote areas.

The welfare of members of the community can be measured from the welfare family consisting of several family members. Every household has a source of income and expenditure for each of its members. As an organization, a household within the context of the community have a role in the economy. The welfare of members of the Household is determined by the level of income and expenditure must be issued at any time. At present, economic growth is sustained by production and consumption activities stimulate the public to always buy the stuff into a desire, not a requirement. Someone motivated to fulfill the desires, without thinking of the amount of income earned. When someone high income tend to be consumerist. If income is less then tend to be owed. So a society accustomed to meet their needs in a way indebted. The amount of debt increases will lower the purchasing power of the public so that gradually. If income is less then tend to be owed. So a society accustomed to meet their needs in a way indebted then the amount of debt increases will lower the purchasing power of the community so that he can not meet the needs of his life. Therefore it takes planning and economic management of households each household in an effort to maintain the sustainability of the household life, where each adult household members are responsible for their respective needs.

For that every family should be aware of the amount of its expenditure plans and revenue plans, i.e., calculate the total revenue and total expenditure planning any family members, arranged not unfounded desire but needs. Based on income and expenditure, a household can arrange realization of income and expenditure. This should be done in order to be known to the surplus or deficit and as an evaluation of whether the plans drawn up in accordance with the plan or not. One of the important factors in financial management for a household is that economic factors could be the trigger for the split of a household. Management of financial good housekeeping will also increase household resilience in life everyday.

Indonesian Bank (2014) in measuring the resilience of household sector in Indonesia that

the resilience of household sector still solid though it got depressed. The majority of household income are mostly used in Indonesia is for consumption (65%), followed by savings (20%) and mortgage payments (15%). These data indicate that in general there is still an effort from households not to use all the revenues in the activities of consumerist. The above data are also increasingly asserted that the inclusive finance programs in Indonesia can still be improved, given the potential for a large population. However, according to a World Bank survey that most of society Indonesia does not have access to banking services and only 20% of the adult community who has an account at a formal financial institutions, as well as the majority of formal financial institutions service centered on the island of Java, Indonesia has given 17000 island makes access to the services of the banking community is increasingly difficult. Therefore it can be concluded that such a big potential not easily to intervened. It is expressed by the Director of Micro and Retail Banking from Mandiri Bank, Budi Gunadi which citing World Bank Data in 2011 that the low number of community saving 79% because communities feel has no money, 9% don't have a job, and 4% of them do not feel the need. The problem of low levels of public access not only on a policy or strategy been conducted but there is the question of the ability/preference/stance there are individuals in the society.

RESEARCH PROBLEM

Good policy without considering the important factors that exist in society makes the strategy/policy already done became ineffective. Therefore, in order to improve inclusive communities in accessing banking services, at this writing strategy model developed inclusive, in this case the non-payment of cash as the basic strategy in the development of the economy of the household.

At this article more specifics discussed about how e-money payment system conceptually can develop household economy, in terms of some of the scope of the study, which covers the aspects of security and comfort in the payment of money, e aspects of technology in e-money payment systems, regulation and policies that can support the e commerce, aspects of incentives in non-payment in cash. The purpose of this article is to find out the role of the e-money payment system on the economic development aspects of household security and comfort, this aspect of the technology in the system of payments, regulation and policies and incentives that can encourage the development of household economy.

STUDY LITERATURE

Payment System

According to the Listfield and Montes-Negret (1994), payment system are the procedures, rules, standards, and instruments used for the exchange of financial value (financial value) between the two parties involved to release themselves from the obligation. Undang-undang No. 11 year of 1999 mentioned that the payment system is a system that includes a set of rules, institutions, and mechanisms, which are used to carry out the transfer of funds to satisfy an obligation arising out of an economic activity.

Hancock and Humphrey (1998), explained that the payment system is an integral system consisting of legal, policy, institutional, transfer procedures as part that does not separate. Efficient payment systems have an impact on the ability of payment facilitates payment systems retail so that the transfer of goods and services to be smooth, as well as financial systems become more liquid. In a general sense of the payment system has the same sense, includes the existence of policies, mechanisms and institutional activities in the economy.

Indonesian Bank said that a payment system consists of several subsystems that are interlinked with each other, namely:

1. Policy

Policies related to regulations that set out to arrange payment. Payment systems policy in Indonesia issued by Bank Indonesia as a regulator, because the payment system determined related to monetary and banking system

2. Institutional

In the payment systems there are institutions that play a role in the payment system. In Indonesia, along with Bank Indonesia to other institutions involved in the payment system is the Monetary Department, banking, non bank financial institutions, payment system operators, telephone operator. Each institution has a role

3. Payment tools

Payment tools consist of means of payment cash and non cash. Cash payment involves money kartal (paper and metals). Transaction economy especially for retail. Currently, payment transaction non cash are also widely used in retail transactions but more widely used for large-value transactions who held Bank Indonesia through a system of BI-RTGS (Real Time Gross Settlement) and the Clearing System. Payment instruments include non cash card, cheque, bilyet giro, debit notes and electronic money

4. Operational mechanism

Payment mechanisms systems is a definite procedure which guarantees can the implementation of payment systems safely and smoothly. Operational mechanism is clearing, transfer and others.

5. Technical infrastructure

Technical infrastructure covers the technical components necessary to process and make the shift of funds, standards such as the system message, the computer network, communication, hardware and software, system back-up, disaster recovery plan and others who support the smooth running of payments systems.

6. Device of law

Device of law in the payment system includes laws, and regulations related to the payment system. Rules of the game as well as the various parties involved, e.g. between banks, interbank and customer, between banks and central banks etc. The role of the legal system is very important to ensure the existence of a legal aspect in implementing the payment system.

Household Economic Management (PERT)

The national community empowerment program in training modules and Household Economic and development (PERT) defines economic development housekeeping action is to plan, execute, monitor, evaluate and control the acquisition and use of family economic resources especially finances so that it reached the level of fulfilment are optimum, ensure there is stability and economic growth.

The benefits of any economic management in the household at least able to meet the economic needs of family members, the economic life of the stability and economic growth. However, the management of household economic activities are the Foundation for the well-being of a family. High income even if it is not balanced with revenue management then it is not impossible that households still lack.

The principle of household economic management

Principles of the management of the household economy is an attempt to increase revenues and control the level of expenditures in meeting the needs of family members so that there is a surplus in the wealth being accumulated continue getting bigger. Based on the above understanding, it is understood that in the management of the household economy needed family financial planning as the controlling family so being able to prioritize needs and desires on the basis of the level of ketermendesakan in order for the distribution of income expenditures can be done in a more equitable manner.

Elektronik Money(e-money)

Electronic money (Electronic Money) is a means of payment that meets the following elements:

- a. Published on the basis of the value of the money paid in advance to the Publisher;

- b. Monetary value stored electronically in a media server or chips;
- c. Used as a payment to merchants
- d. The value of electronic money which is managed by the Publisher is not a deposit as stipulated in the legislation governing banking

The shape of the e-money distinguishable based storage media namely i.e. chip-based and server-based. In addition, based on data recording the identity of the holder, Bank Indonesia to differentiate between users who registered their identity and are not registered its identity. It aims to monitor user activity and transaction profiles, so that different types of required services between users that are registered and not registered. The different types of facilities services for users that are registered and not registered as follows:

Facilities that can be given by the issuer of electronic money types listed and recorded is:

- a. Registration Holder;
- b. Replenishment (top up);
- c. Payment transactions;
- d. Bill payment;
- e. Transfer of funds;
- f. Cash withdrawals;
- g. Distribution of government aid programs to the community;
- h. Other facilities based on the approval of Bank Indonesia

As for the facilities that may be provided by the Publisher type of electronic money to the community which is not registered, is;

- a. Refill (top up);
- b. Payment transactions;
- c. Payment of bills;
- d. Other facilities based on the approval of Bank Indonesia

RESEARCH METHOD

This article using a qualitative approach to the literature review. Creswell (2010), describes a literature review has some purpose; inform the reader of the results of other studies are closely related to the research done at that time, linking research with existing literature-literature, and filling the gaps in previous studies. On this article, authors use literature review in order to obtain the answers related to opinions, responses or perceptions of a person so that the discussion should be uses a qualitative or uses a words.

In accordance with the scope of this article, the author did a literature review in discussing about the role of the e-money payment system in relation to the development of the economy of the household in terms of the aspects of the security and convenience of payment e money, technology or infrastructure in e-money payment systems, regulation and policies that can support the e commerce, aspects of incentives in non-payment of cash. The author uses a variety of sources in a form, the theory, the results of previous research, expert opinions, modules, online newspapers, and others to address the formulation of a problem.

Aspects of the security and convenience of E-Money payment system in the development of Household Economy

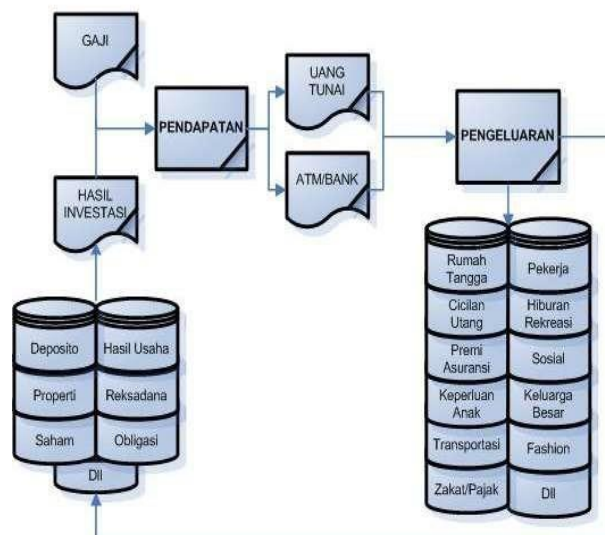
A healthy family also determined by how the management of the family against aspects of financial management. A good family financial management is not specified the amount of income which is great, but how is the family able to devise priority based on need rather than desire. The family is determined by the decisions of parents mother and father, as is the case with family finances strategic decisions where parents ' behavior as a purchasing decision makers. Ardinani (2011) mentioned some of the factors that influenced the decision of financial management for example, desire, prestige, self-respect, follow the style of the person who made the basis of

someone to make a purchase that is not on the basis of need but desire.

Financial errors behaviors identified by Garman (1996) ; excessive spending, excessive use of credit facilities, did not have pension fund, unable to pay the loan installments, the use of credit cards over the limit, do not have a pension plan, debt greater than the existing assets. Household financial management is determined by the individuals who are in the household, for it takes good communication about the amount of revenue and expenditure plans of each Member of the family. The spending plans of each Member of the family should be evaluated monthly to conform with the planning. In this context required the recording of financial good housekeeping, practical and efficient.

The use of e-money (as well as card-based software) by each household eases financial management because every spending in evidence making it easy in the preparation of monthly cash flow reports. Preparation of cash flow makes it easy for the evaluation and control of so known for what money has been spent.

In terms of the practicality of the maintainer (usually maintained a housewife), a housewife transaction more easily because of the use of the e money not save large amounts of cash to purchase routine is spent per month, and do not need often to ATMs (via mobile money) to take the money in cash then new shopping. Some regular House payments by using e-money include: Electric payment and water, instalment credit, transport, and others. More types of payments made through e-money can cause increases household comfort. Households do not go by a variety of activities are time-consuming to perform various payments to be done routinely every month. For more details about household financial management can be seen in the following image:



Cashflow family financial management diagram

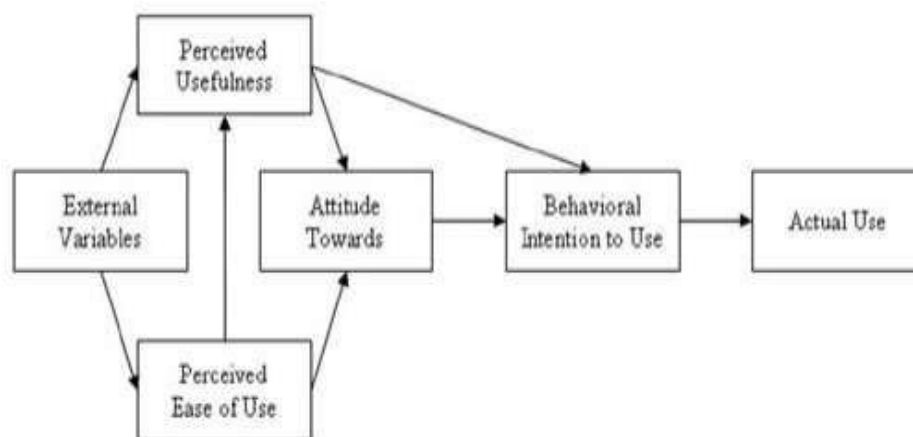
Another important factor is safety. Study by Bank Indonesia (2006), that the security of the transaction is the first order of importance in the non-payment of cash. It shows that in the system of non-payment of cash, security is a major element of the desired respondents, such as escape from crime, safe from interruption of hackers and so on. For households, the use of e-money while reducing the amount of cash that is managed so as to reduce the anxiety against the repercussions can be inflicted if still holding cash, because the possibility for existence of crimes like theft and robbery on a household persists. If any cash deposited only a small nominal money for unforeseen expenses.

Technological aspects of E-Money payment system in the development of Household Economy

One of the phenomena in Indonesia presented by Michael Joseph co-founder of M-Pesa, that the gap between the penetration of the bank or the ownership of a bank account with mobile phone penetration is very large. The number of cellular phone users in Indonesia reached 422 million, World Bank data mentions that the adult population who have accounts in the bank only 20%. This indicates the potential for the use of e-money by using software via mobile phone in such a big deal. The current use of e-money in Indonesia not only through storage- based software, but also have developed a chip-based.

Bank Indonesia has pioneered elektronik in a road map development of non cash transactions making it possible for users to use multiple channels (delivery channel) with the same standards through one terminal. In this case, Bank Indonesia is being pioneered the concept of the technology that makes it easier for the public to use e-money. The existence of the technology associated with the impact on the user's ease. Should technology are ease of use especially if should be used extensively to all walks of life.

Adoption concept of the use of information technology has been developed Davis (1989). This concept is adopted the use of information technology is influenced by perceptions, attitudes and behaviour. Perception is comprised of perceived usefulness and perceived ease of use. The perception of usefulness is defined the extent to which a person is trusting that the use of information technology can enhance the performance of, and perceived ease of use is the degree to which a person believe that the use of information technology to reduce the burden of his task. Both of these factors is an influential cognitive assessment against the attitude, if the assessment of these two factors is positive then it would have an impact on the attitudes of both positive. A positive attitude will have an impact on interest or positive intentions to behave. The concept of Technology Acceptance Model (TAM), is described as follows:



TAM Models (Davis, 1989)

Each household per period get income and expenditure which may take the form of cash or non cash. As an organization should be able to manage their household finances well. E-money is currently been developed in various forms of models all of which technology-based information. Any transaction both the receipt or expenditure can use usage information system e – money that already exists. Important thing to note is the extent to which existing information technologies in e-money can give a positive assessment by households so that the impact on a positive attitude. Positive assessment depends on the extent to which the technology has benefits and reduce the burdens of duties in the household

Regulation and policy for economic development of households Supporting E-Commerce

The household during this is only seen as a consumer sector doing more purchases than do the activities oriented to profit. Household economic development not only of financial efficiency-oriented family, but also the role of the family as the sector of manufacturers for production inputs. Quite a number of companies in Indonesia were derived from family businesses, for example: the company's herbal medicine Mrs Meneer, Garuda Food, Kalla Group, and others.

The role of the household sector as manufacturers to increase family income. Most families have some revenues, such as working parents (father and mother working), father works and the mother does not work. In domestic life, a mother obliged to serve her husband and son in all aspects of life that exists within the family. The current role of the mother, that is helping to boost the income of the husband's family.

Advances information technology that is increasingly growing, encourage housewives to increase family income without having to leave his role as a supporting of the family economy. E-Commerce is doing business electronically with the complete business process through electronic networks. The advantages of e-commerce for housewives to run a household-scale businesses are cost and does not require much time, just a housewife can do business only with a set of smartphones, computers, and tablet. So a housewife can increase family income without reducing his concern for families.

But in general the benefits of e-commerce according to Nuary (2010) as follows:

- Shorten the distance. It means the e-commerce has no limits – limits and time, thus providing a broad range of marketing because consumers living in all places can make a purchase through the online store are made.
- E-commerce increasing a market exposure (market share), in which the use of e-commerce enables users to increase the market share of the reconstruction may only have a market share in one city alone could have changed so has the market share in other cities or even abroad.
- Huge savings can be obtained through e-commerce. This occurs because the savings the reduced use of paper in any transaction process, where everything in the e-commerce using digital data so as not to needed a paper as an transactional media and the end it will be provides savings on the expenditure to the process transaction.
- Selling via the internet (E-commerce) does not knowing the holidays, all transactions can be done anytime and anywhere. Selling through the internet media is also safer than open a store.

This is encouraged as more easily for people to transacting online, which supported an increasingly flexible payment system through a variety of means of payment e-money saved through either chip or media server. Business transactions through e-money allows businessmen to send small amounts of money and costs are cheap, fast and secure. So businessmen households still can perform business activities in profitable.

However, there are things that need to be observed according to trade law No.7 Year 2014 that perpetrators of online businesses should also compile data and evidence of the transaction correctly. With various payment transactions will complicate the efforts of diverse household sector due to the recording of transactions through bank accounts that are not separated with other purposes. Along with the increase in the number of transactions in the account registration then separate split-will be increasingly difficult. For it is required a payment account can accept payments from various banks, so that the efforts of households not getting burdened with various administrative costs from various banks. For that Bank Indonesia and related ministries can sort rules for the implementation of policies more and make it easier for the household sector to do e-commerce activities in order to improve the economy of the household.

The incentive aspect of the E-Money payment system in the development of Household Economy

Household businesses is a household-scale sector more as retail or retail or small scale production. One factor is the problem is the low capitalization. The reduction of transaction costs in the transaction e-money is expected to reduce the burden of household business, such as a reduction in costs of managing the account minimum balance, fine. The load will increase if the household businesses have many bank accounts. The reduction in transaction costs will increase profit for businesses households potentially encouraging business activity and expansion effort. The more efficient the transaction costs of using e-money the greater potential for increased output that encourage increased production in the real sector so as to encourage economic growth.

The giving of reward is also possible in the use of an e-money payment system. The community who use the e-money payment system in a certain amount can be given points, which can be exchanged for a specific value. So that households are increasingly interested in using e-money payment system.

Mother or household-scale trade in conducting business activities online trading, many use social media (facebook, twitter, instagram, etc.), or Web sites (olx.co.id, kaskus.co.id) that provide the space to do targeted demographic promotions to the buyer. Mother or household trade can act as a manufacturer or distributor of the goods on the scale of households or small bussiness.

DISCUSSION

Payment via e money can increase the efficiency of time and practicality due to provide transparency and accountability in the management of finance households than if making payment in cash as well as reduce the aspect of concern over crime. Payment through e money provide ease of the transaction because it supported the information technology facilities that can provide the benefits and ease of. Payment via e money needs to be supported the policy of one payment account can accept payments from various banks, so that the efforts of households not getting burdened with various administrative expenses. Reduction of the load and the granting of awards will enhance the use of e money.

Even so, there's still needed socialization towards cultural e payment via money for example through media-social media. Needed in cooperation with various agencies to enhance the use of e money. Still needed a policy that supports the payment system e-money in one account for multi transactions.

REFERENCE

- Alamsyah, Halim. (2014). Memperkuat Stabilitas Sistem Keuangan di Tengah Ketidakseimbangan Eksternal. KSK No. 22.
- Ardiani, Ika, S. (2011). Personality Traits sebagai Penentu Perencanaan Keuangan Keluarga: Suatu Kajian Pustaka, *Jurnal Pengembangan Humaniora*, Vol 11, No.2.
- Bank Indonesia (BI). (2014). Booklet Keuangan Inklusif. BI. Jakarta.
- Bank Indonesia (BI). (2006). Persepsi, Preferensi Dan Perilaku Masyarakat Dan Lembaga Penyedia Jasa Terhadap Pembayaran Non Tunai. BI. Jakarta.
- Creswell John W., (2010). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 3th, terjemahan Achmad Fawaid, Yogyakarta.
- Davis, F. D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly* **13** (3): 319–340
- Dharmasaputra, Karaniya dan Rahayu Nina. (2011). Mobile-Money M-Pesa Pas Untuk Indonesia <<http://fokus.news.viva.co.id/news/read/255368--mobile-money-m-pesa-pas-untuk-indonesia> (3 Juli 2015).
- Garman, Thomas dan Irene E.Leech, John E.Grable, Virginia Tech. (1996). The Negative Impact of Employee Poor Personal Financial Behaviors On Employers, *Journal of Association For Financial Counseling and Planning Education*, 157.
- Hancock, Diana dan David B. Humphrey. (1998). Payment Transactions, Instruments, and Systems: A Survey. *Journal of Banking & Finance*. 21, 1573-1624.
- Kempson, E. & Whyley, C., (1998). Understanding and combating financial exclusion. Joseph Rowntree Foundation, York.
- Kendall, Jake, (2010). A Penny Saved: How Do Savings Accounts Help the Poor? <<http://ssrn.com/abstract=1982461>.
- Listfield, R. dan F. Montes Negret. (1994). Modernizing Payment System in Emerging Economies. *World Bank Policy Research Working Paper*, 1336.
- Nuary, Ficky Dima. (2010). Implementasi Tehory of Planned Behavior dalam Adopsi E-Commerce Oleh UKM (Studi pada UKM yang berada di Kota Surakarta tahun 2009). Solo. Universitas Negeri Sebelas Maret.
- Park, S. Y. (2009). An Analysis of the Technology Acceptance Model in Understanding University Students' Behavioral Intention to Use e-Learning. *Educational Technology & Society*, 12 (3), 150–162.
- Pinerua, Carlos. (2013). Financial Development and Implication For Indonesian Bankers Association National Seminar. The World Bank Indonesia.
- Purnomo, Herdaru. (2011). 79% Orang Indonesia Tak Menabung Karena Tak PunyaUang, <http://finance.detik.com/read/2011/11/25/144051/1775634/5/79-orang-Indonesia-tak>

menabung-karena-tak-punya-uang.

Ramdhania El Hida. (2012). Soal Jumlah Rekening Bank, RI Paling Ketinggalan di ASEAN, Detikfinance.

Program Nasional Pemberdayaan Masyarakat (PNPM). (2005). Modul Pelatihan dan dan Pendampingan dan Pengeloan Ekonomi Rumah Tangga. <http://p2kp.org/pustakadetil.asp?mid=47&catid=2&>

Widianto, Bambang. (2012). National Strategy for Financial Inclusion: Fostering Economic Growth and Accelerating Poverti Reduction, National Team for The Acceleration of The Poverty Reduction. Office of The Vice President The Republic of Indonesia.